

Bus Rapid Transit for Montgomery County
By Councilmember Marc Elrich

In Montgomery County, Maryland there is little opportunity to add additional roadway capacity, especially in the denser, more urban areas. If the Washington Council of Governments (COG) population projects are accurate, COG predicts that Montgomery County will grow by about a third by 2050. If congestion is bad now, how will we get around 10, 20, 50 years from now?

With the inability to expand the roadway system and an increasing population, alternative transportation methods need to be considered. Ideally, we would like to add more rail lines but at \$300 - \$400 million per mile for heavy rail like Metro and \$50 - \$100 million per mile of light rail, we cannot afford to build much of a next generation public transportation system. At \$10 - \$25 million per mile, bus rapid transit (BRT) is less expensive and allows for more interconnecting routes.

What is BRT? Think of a rail system with dedicated right of ways, station stops, high quality vehicles, frequent reliable fast service, but the vehicle has rubber tires instead of steel wheels. BRT combines the most attractive components of light rail with the flexibility and lower cost of bus technology. On their website, Alameda County Transit (Oakland, CA) described BRT this way. "Bus Rapid Transit is essentially light rail without the tracks. It combines the speed and capacity of light rail with the convenience and affordability of riding the bus. With dedicated lanes and signal priority, BRT moves faster than regular traffic, offering a more efficient ride for passengers. In addition, BRT can be deployed more quickly than light rail and at a fraction of the cost."

As the BRT system is built, the benefits of each completed segments can be realized immediately, but true value comes with the completion of a system which connects all the County's housing areas with its job centers.

Because the buses operate in guideways, the lanes are narrow with minimal right of way requirements. The guideways can usually fit in existing road median strips thus not requiring the acquisition of expensive new property. BRT routes can be converted to light rail (LRT) if demand warrants in the future. BRT, LRT, Metrorail and local bus service can work together to create a complete public transportation system.

One, maybe the only, advantage of the suburban sprawl pattern of development is that traffic travels predominantly one way during the peak hour. Therefore, if we add one dedicated BRT lane, it can be used for rapid travel in in the morning and the buses can return on the regular roadway in the non-peak direction. The process is reversed in the evening. This significantly reduces the capital expenditure necessary to create the network.

To start, current buses can cost effectively be outfitted with equipment to use the guideways, but as new stock is added, it can be upgraded to make the BRT experience

even better. Buses can drive into existing stations without elaborate modifications.

Finally, if we are to meet our CO2 reduction targets, we need to reduce vehicle miles traveled (VMT) in Montgomery County by 8 - 10% to get back to 2002 levels and somewhere between 15-20% to get back to 1990 levels. 8%, 15%, 20% are doable numbers. Not everyone has to get out of their car. To the extent that there are 8% to 15% fewer vehicles on the road, then the intersections begin to clear up, the street network begins to work much better for those still driving and for the buses still in regular traffic.

Cleaner air, less congested roads, extensive convenient service, and support for healthy sustainable economic development, BRT is a transportation solution for Montgomery County in the 21st century.